

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A TRIP steel sheet with excellent bendability comprising:

C : from 0.06 mass% to 0.25 mass%;

at least one of Si and Al : total 0.5-3 mass%;

Mn : from 0.5 mass% to 3 mass%;

P : from 0.03 mass% to 0.15 mass%; and

S : no more than 0.02 mass% (excluding 0 mass%), wherein

the steel sheet includes 5-30 area% of retained austenite and no less than 50 area% of ferrite;

the retained austenite and ferrite account for no less than 70 area% of the steel sheet;

and

there exist no more than 40 carbide grains per $2000 \mu\text{m}^2$ in the steel sheet between the retained austenite and the ferrite.

Claim 2 (Currently Amended): The TRIP steel sheet as defined in Claim 1, further comprising at least one member selected from the group consisting of:

Mo : no more than 1 mass% (excluding 0 mass%);

Ni : no more than 0.5 mass% (excluding 0 mass%); and

Cu : no more than 0.5 mass% (excluding 0 mass%).

Claim 3 (Currently Amended): The TRIP steel sheet as defined in Claim 1, further comprising at least one of Ca of no more than 0.003 mass% (excluding 0 mass%) and rare earth element of no more than 0.003 mass% (excluding 0 mass%).

Claim 4 (Currently Amended): The TRIP steel sheet as defined in Claim 1, wherein the steel sheet includes 5-20 area% of retained austenite.

Claim 5 (Currently Amended): The TRIP steel sheet as defined in Claim 1, wherein there exist no more than 30 carbide grains per $2000 \mu\text{m}^2$ in the steel sheet.

Claim 6 (Withdrawn - Currently Amended): The TRIP steel sheet as defined in Claim 1, wherein the steel sheet is produced by a process comprising heating a steel to a temperature higher than the A_1 point and lower than the A_3 point; then cooling the steel to a temperature of $700 \pm 30^\circ\text{C}$; keeping the steel at the temperature of $700 \pm 30^\circ\text{C}$ for 10-30 seconds; then cooling the steel at a cooling rate larger than 10°C/sec to a temperature of $400 \pm 50^\circ\text{C}$; and then cooling the steel to room temperature.

Claim 7 (Withdrawn - Currently Amended): A method of making a steel sheet, the method comprising heating a steel; and producing the TRIP steel sheet of Claim 1.

Claim 8 (Withdrawn): The method as defined in Claim 7, wherein the heating comprises:

keeping the steel at a temperature higher than the A₁ point and lower than the A₃ point;

then cooling the steel to a temperature of 700±30°C;

keeping the steel at the temperature of 700±30°C for 10-30 seconds;

then cooling the steel at a cooling rate larger than 10°C/sec to a temperature of 400±50°C; and

then cooling the steel to room temperature.

Claim 9 (Currently Amended): The TRIP steel sheet as claimed in Claim 1, wherein there exist 9 to 40 carbide grains per 2000 µm² in the steel sheet between the retained austenite and the ferrite.

Claim 10 (Canceled)